

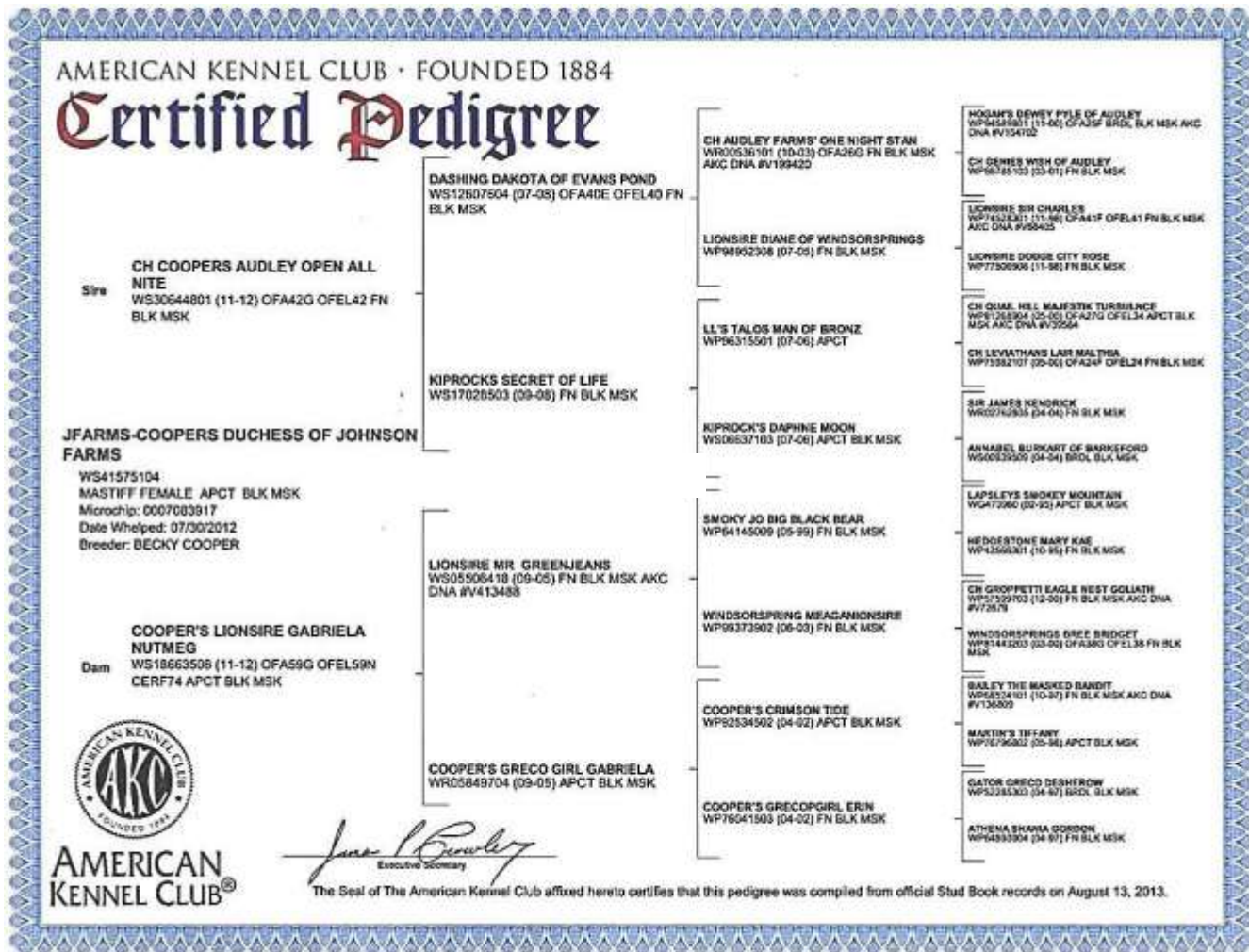
# General Big Stuff's Wingman



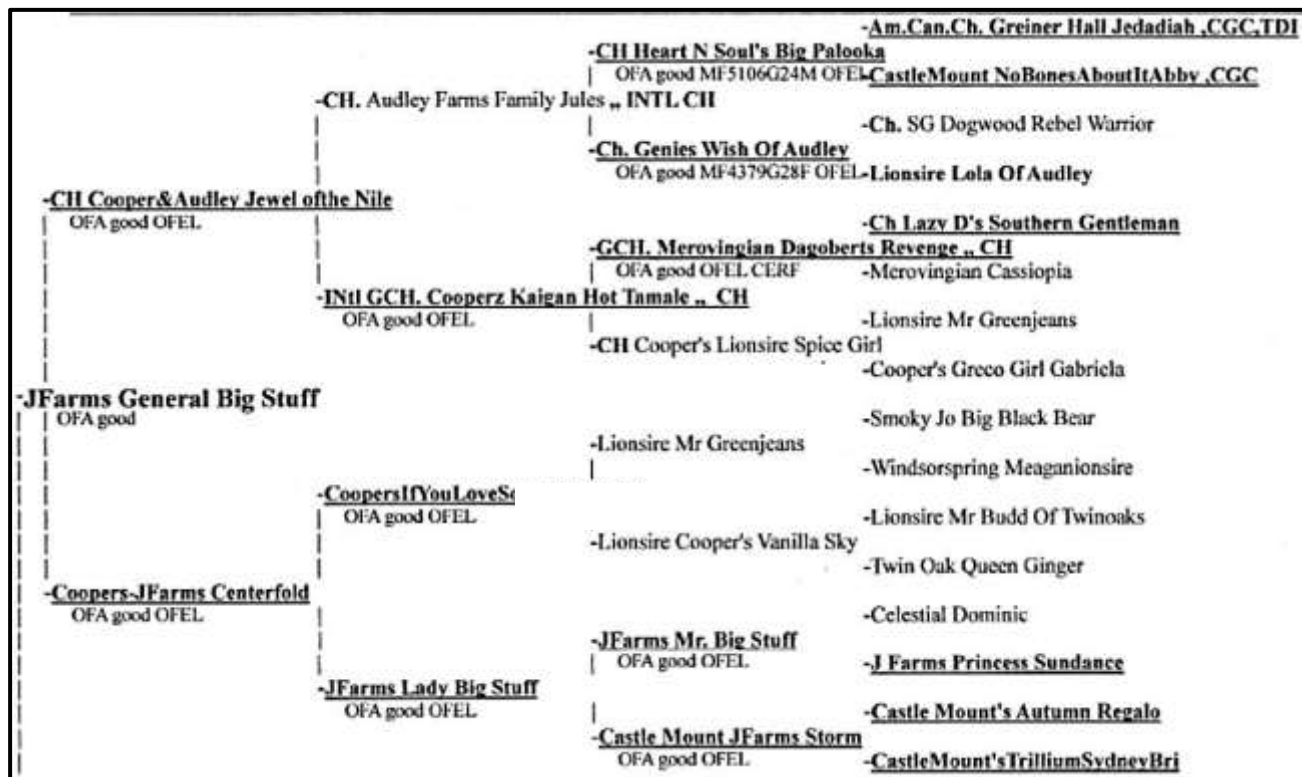
**Age 2**

AMERICAN KENNEL CLUB		
NAME JFARMS GENERAL BIG STUFF'S WINGMAN	NUMBER WS61567001	PROUDLY BREDED BY AN AKC BREEDER OF MERIT
BREED MASTIFF	SEX MALE	 <b>American Kennel Club®</b> <small>If a date appears after the name and number of the sire and dam, it indicates the issue of the Stud Book Register in which the sire or dam is published.  This certificate issued with the right to correct or revoke by the American Kennel Club.</small>
COLOR FAWN, BLACK MASK	DATE OF BIRTH JUNE 30, 2018	
SIRE JFARMS GENERAL BIG STUFF WS53037501 (10/18) OFA24G EYE23 AKC DNA #V854750		
DAM JFARMS COOPERS DUCHESS OF JOHNSON FARMS WS41575104 (02/16) OFA26E OFEL26		
BREEDER DR. PAIGE EDWARD JOHNSON & MRS. SHARON KAY JOHNSON & BECKY COOPER		
OWNER DR. PAIGE EDWARD JOHNSON & MS. SHARON K JOHNSON		
REGISTRATION CERTIFICATE		

## WINGMAN's DAM's REDIGREE



## WINGMAN's SIR's REDIGREE





General Big Stuff's Wingman (Biggie) has completed his CAER Test for CHIC Certification (eyes dilated and examined visually by Vet Ophthalmologist which has to be completed after he is 2 years of age {June 30, 2020}). Due to Covid-19, all Vet Ophthalmologist in a 200 mile radius will only see dogs for surgery, emergencies, and treatment – NOT well dogs for CAER Testing. However, **Biggie has passed the following 34 Eye (ocular) DNA Tests well beyond the one (1) OFA required visual (non-DNA) ocular test requirement.**

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BR15 357

JFARMS GENERAL BIG STUFF'S WINGMAN, Mastiff

### Ocular Disorders - page 1

Disorder	Mode of Inheritance	Result
Canine Multifocal Retinopathy 2, (CMR2); mutation originally found in Colón de Tulear	Autosomal Recessive	Clear
Canine Multifocal Retinopathy 3, (CMR3); mutation originally found in Lapponian Herder	Autosomal Recessive	Clear
Cone Degeneration, (CD) or Achromatopsia; mutation originally found in Alaskan Malamute	Autosomal Recessive	Clear
Cone Degeneration, (CD) or Achromatopsia; mutation originally found in German Shepherd Dog	Autosomal Recessive	Clear
Cone Degeneration, (CD) or Achromatopsia; mutation originally found in German Shorthaired Pointer	Autosomal Recessive	Clear
Cone-Rod Dystrophy 1, (crd1); mutation originally found in American Staffordshire Terrier	Autosomal Recessive	Clear
Cone-Rod Dystrophy 2, (crd2); mutation originally found in American Pit Bull Terrier	Autosomal Recessive	Clear
Cone-Rod Dystrophy, (crd1-PRA / crd4)	Autosomal Recessive (Incomplete Penetrance)	Clear
Cone-Rod Dystrophy, Standard Wirehaired Dachshund, (crd SWD)	Autosomal Recessive	Clear
Congenital Eye Disease; mutation originally found in Irish Soft-Coated Wheaten Terrier	Autosomal Recessive	Clear
Early Onset PRA (EQPRA); mutation originally found in Portuguese Water Dog	Autosomal Recessive	Clear
Early Retinal Degeneration, (erd); mutation originally found in Norwegian Elkhound	Autosomal Recessive	Clear
Generalized Progressive Retinal Atrophy	Autosomal Recessive	Clear
Golden Retriever Progressive Retinal Atrophy 1, (GR_PRA 1)	Autosomal Recessive	Clear
Goniodysgenesis and glaucoma; mutation originally found in Border Collie	Autosomal Recessive	Clear
Italian Greyhound Progressive Retinal Atrophy 1 (IG-PRA1)	Autosomal Recessive	Clear
Primary Hereditary Cataract, (PHC); mutation originally found in Australian Shepherd	Autosomal Dominant (Incomplete Penetrance)	Clear
Primary Lens Luxation, (PLL)	Autosomal Recessive	Clear
Primary Open Angle Glaucoma, (POAG); mutation originally found in Basset Fauve de Bretagne	Autosomal Recessive	Clear
Primary Open Angle Glaucoma, (POAG); mutation originally found in Beagle	Autosomal Recessive	Clear
Primary Open Angle Glaucoma, (POAG); mutation originally found in Norwegian Elkhound	Autosomal Recessive	Clear

### Ocular Disorders - page 2

Disorder	Mode of Inheritance	Result
Primary Open Angle Glaucoma, (POAG); mutation originally found in Petit Basset Griffon Vendéen	Autosomal Recessive	Clear
Primary lens luxation (PLL) and glaucoma; mutation originally found in Shar Pei	Autosomal Recessive	Clear
Progressive Retinal Atrophy (PRA4); mutation originally found in Lhasa Apso	Autosomal Recessive	Clear
Progressive Retinal Atrophy Type III, (PRA type III); mutation originally found in Tibetan Spaniel and Tibetan Terrier	Autosomal Recessive	Clear
Progressive Retinal Atrophy, (CNGA1-PRA); mutation originally found in Shetland Sheepdog	Autosomal Recessive	Clear
Progressive Retinal Atrophy, (PAP1_PRA); mutation originally found in Papillon and Phalene	Autosomal Recessive	Clear
Progressive Retinal Atrophy, (PRA); mutation originally found in Basenji	Autosomal Recessive	Clear
Progressive Retinal Atrophy, (PRA); mutation originally found in Swedish Valhund	Autosomal Recessive	Clear
Rod-Cone Dysplasia 1, (rdc1); mutation originally found in Irish Setter	Autosomal Recessive	Clear
Rod-Cone Dysplasia 1a, (rdc1a); mutation originally found in Sloughi	Autosomal Recessive	Clear
Rod-Cone Dysplasia 3, (rdc3)	Autosomal Recessive	Clear
X-Linked Progressive Retinal Atrophy 1, (XLPRA1)	X-linked Recessive	Clear
X-Linked Progressive Retinal Atrophy 2, (XLPRA2; Type A PRA)	X-linked Recessive	Clear

**Registered Name:** JFARMS GENERAL BIG STUFF'S WINGMAN  
**Nickname:** BIGGIE (Wingman)  
**Registration ID:** WS61567001  
**Microchip:** 956000009697376  
**Breed:** Mastiff  
**Gender:** Male

**Owner:** Paige & Sharon Johnson  
**Country:** United States  
**Testing date:** 2020/8/7

## Test results - Known disorders in the breed

Disorder	Type	Mode of Inheritance	Result
Canine Multifocal Retinopathy 1, (CMR1); mutation originally found in Mastiff-related breeds	Ocular Disorders	Autosomal Recessive	Clear
Degenerative Myelopathy, (DM; SOD1A)	Neurological Disorders	Autosomal Recessive (Incomplete Penetrance)	Clear
Dominant Progressive Retinal Atrophy, (DPRA)	Ocular Disorders	Autosomal Dominant	Clear

## Test results for pharmacogenetics

Disorder	Mode of Inheritance	Result
Multi-Drug Resistance 1, (MDR1)	Autosomal Dominant	Clear

On behalf of Genoscoper Laboratories,



SIGNATURE

Jonas Donner, PhD, Head of Research and Development  
at Genoscoper Laboratories

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CMR DNA Clear  
DM DNA Clear  
PRA DNA Clear

ORTHOPEDIC FOUNDATION FOR ANIMALS, INC.

JFARMS GENERAL BIG STUFF'S WINGMAN

registered name

MASTIFF

breed

firm/stock #

956000009697376

tattoo/microchip/DNA profile

2070102

application number

07/21/2020

date of report

RESULTS:

Based upon the radiograph submitted, the consensus was that no evidence of hip dysplasia was recognized. The hip joint conformation was evaluated as:

WS61567001

registration no.

M

sex

06/30/2018

date of birth

24

age at evaluation in months

MF-9892G24M-VPI

O.F.A. NUMBER

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A Not-For-Profit Organization



OFA eCert



Verify certificate with QR scan

www.ofa.org

OWNER

DR PAIGE E JOHNSON  
SHARON K JOHNSON  
PO BOX 125  
LEONARDTOWN MD 20650

GOOD

*G.G. Keller, D.V.M., M.S., DACVR*

G.G. KELLER, D.V.M., M.S., DACVR  
CHIEF OF VETERINARY SERVICES

ORTHOPEDIC FOUNDATION FOR ANIMALS, INC.

JFARMS GENERAL BIG STUFF'S WINGMAN

registered name

MASTIFF

breed

956000009697376

tattoo/microchip/DNA profile

2070102

application number

7/16/2019

date of report

RESULTS:

The results of the examination submitted to OFA indicate that no evidence of patellar luxation was recognized.

WS61567001

registration no.

M

sex

6/30/2018

date of birth

12

age at evaluation in months

MF-PA3203/12M/P-VPI

O.F.A. NUMBER

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NORMAL - PRACTITIONER

*G.G. Keller, D.V.M., M.S., DACVR*

G.G. KELLER, D.V.M., M.S., DACVR  
CHIEF OF VETERINARY SERVICES

OWNER

DR PAIGE E JOHNSON  
SHARON K JOHNSON  
PO BOX 125  
LEONARDTOWN, MD 20650

www.ofa.org

ORTHOPEDIC FOUNDATION FOR ANIMALS, INC.

JFARMS GENERAL BIG STUFF'S WINGMAN

registered name

MASTIFF

breed

NYAP01550631

firm/stock #

956000009697376

tattoo/microchip/DNA profile

2070102

application number

7/16/2019

date of report

RESULTS:

Based on the laboratory results submitted, no evidence of thyroid disease was recognized.

WS61567001

registration no.

M

sex

6/30/2018

date of birth

12

age at evaluation in months

MF-TH1860/12M-VPI

O.F.A. NUMBER

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NORMAL

*G.G. Keller, D.V.M., M.S., DACVR*

G.G. KELLER, D.V.M., M.S., DACVR  
CHIEF OF VETERINARY SERVICES

OWNER

DR PAIGE E JOHNSON  
SHARON K JOHNSON  
PO BOX 125  
LEONARDTOWN, MD 20650

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Thyroid Tests Not Required by OFA



ORTHOPEDIC FOUNDATION FOR ANIMALS, INC.

JFARMS GENERAL BIG STUFF'S WINGMAN

registered name

MASTIFF

breed

C074279

filmtestlab #

956000009697376

tattoo/microchip/DNA profile

2070102

application number

07/30/2020

date of report

RESULTS:

NORMAL: NO EVIDENCE OF CONGENITAL OR ADULT ONSET INHERITED HEART DISEASE - AUSCULTATION & ECHO  
(NOTE: THE CONGENITAL CLEARANCE IS CONSIDERED PERMANENT; ADULT ONSET CLEARANCE VALID FOR 1 YEAR  
FROM TEST DATE 07/22/2020.)

EXAMINER: CC13-RICHARD COBER, DVM, DACVM

WS61567001

registration no.

M

sex

06/30/2018

date of birth

24

age at evaluation in months



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MF-ACA146/24M-VPI

O.F.A. NUMBER

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owner

DR PAIGE E JOHNSON  
SHARON K JOHNSON  
PO BOX 125  
LEONARDTOWN MD 20650

OFA eCert



Verify certificate  
with QR scan

*G.G. Keller, D.V.M.*  
G.G. KELLER, D.V.M., M.S., DACVR  
CHIEF OF VETERINARY SERVICES

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# Optimal Selection™

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JFARMS GENERAL BIG STUFF'S WINGMAN, Mastiff

Registered JFARMS GENERAL BIG STUFF'S  
Name: WINGMAN

Owner: Paige & Sharon Johnson

Nickname: BIGGIE (Wingman)

Country: United States

Registration WS61567001

Testing date: 2020/8/7

ID:

Microchip: 956000009697376

Breed: Mastiff

Gender: Male

## Test results - Traits - page 1

### Coat Type

Trait	Genotype	Description
Coat Length	L/L	The dog is likely to have short-haired coat.
Furnishings / Improper Coat in Portuguese Water Dogs (marker test)	GG/CC	The dog is not genetically likely to express furnishings.
KRT71 c.451C>T (p.Arg151Trp)	C/C	The dog does not carry any copies of the tested allele causing curly coat. The dog most likely has non-curly hair.
MC5R c.237A>T	T/T	The dog has two copies of the allele associated with low shedding. The dog is likely average or low shedder.
SGK3 (p.Val96Glyfs)	I/I	The dog does not carry the tested hairlessness allele of the American Hairless Terrier.
SGK3 c.137_138insT (p.Glu47Glyfs)	D/D	The dog does not carry the tested hairlessness allele of the Scottish Deerhound.

On behalf of Genoscooper Laboratories,

*Jonas Donner*  
SIGNATURE

Jonas Donner, PhD, Head of Research and Development  
at Genoscooper Laboratories

Registered JFARMS GENERAL BIG STUFF'S

Name: WINGMAN

Owner: Paige & Sharon Johnson

Country: United States

Nickname: BIGGIE (Wingman)

Testing date: 2020/8/7

Registration ID: WS61567001

ID:

Microchip: 956000009697376

Breed: Mastiff

Gender: Male

## Test results - Traits - page 3

### Body Size

Trait	Genotype	Description
<i>IGF1</i> (chr15:41221438)	G/G	The dog is homozygous for the ancestral allele typically associated with large body mass.
<i>IGF1R</i> c.611G>A (p.Arg204His)	G/G	The dog carries two ancestral alleles typically found in larger-sized breeds.
<i>ACSL4</i> chrX:82919525C>T	T/T	The dog has two copies of the allele associated with large skeletal size and heavy muscling with considerable back fat thickness.
<i>IGSF1</i> p.Asp768Glu	A/A	The dog has two copies of the allele associated with heavy muscling.
<i>IRS4</i> chrX:82296039	A/A	The dog has two copies of the allele associated with large body size.
<i>FGF4</i> insertion	D/D	The dog is homozygous for the ancient allele. The dog is likely to have legs of normal length.
<i>STC2</i> (chr4:39182836)	T/T	The dog has two copies of the ancestral allele associated with larger body size.
<i>GHR1</i> (p.Glu191Lys)	G/G	The dog has two copies of the ancestral allele associated with larger body size.
<i>GHR2</i> (p.Pro177Leu)	C/C	The dog has two copies of the ancestral allele associated with larger body size.
<i>HMGA2</i> (chr10:8348804)	G/G	The dog has two copies of the ancestral allele associated with larger body size.

On behalf of Genoscooper Laboratories,

  
SIGNATURE

Jonas Donner, PhD, Head of Research and Development  
at Genoscooper Laboratories

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## Test results - Additional disorders found in other breeds - page 1

### Blood Disorders - page 1

Disorder	Mode of Inheritance	Result
Bleeding disorder due to P2RY12 defect	Autosomal Recessive	Clear
Canine Cyclic Neutropenia, Cyclic Hematopoiesis, Grey Collie Syndrome, (CN)	Autosomal Recessive	Clear
Canine Leukocyte Adhesion Deficiency (CLAD), type III	Autosomal Recessive	Clear
Canine Scott Syndrome, (CSS)	Autosomal Recessive	Clear
Factor IX Deficiency or Hemophilia B; mutation Gly379Glu	X-linked Recessive	Clear
Factor IX Deficiency or Hemophilia B; mutation originally found in Airedale Terrier	X-linked Recessive	Clear
Factor IX Deficiency or Hemophilia B; mutation originally found in Lhasa Apso	X-linked Recessive	Clear
Factor VII Deficiency	Autosomal Recessive	Clear
Factor VIII Deficiency or Hemophilia A; mutation originally found in Boxer	X-linked Recessive	Clear
Factor VIII Deficiency or Hemophilia A; mutation originally found in German Shepherd Dog	X-linked Recessive	Clear
Factor VIII Deficiency or Hemophilia A; mutation originally found in Havanese	X-linked Recessive	Clear
Factor VIII Deficiency or Hemophilia A; mutation originally found in Old English Sheepdog	X-linked Recessive	Clear
Factor VIII Deficiency or Hemophilia A; p.Cys548Tyr mutation originally found in German Shepherd	X-linked Recessive	Clear
Factor XI Deficiency	Autosomal Dominant (Incomplete Penetrance)	Clear
Familial Congenital Methemoglobinemia; mutation originally found in Pomeranian	Autosomal Recessive	Clear
Glanzmann Thrombasthenia Type I, (GT); mutation originally found in Pyrenean Mountain Dog	Autosomal Recessive	Clear
Glanzmann Thrombasthenia Type I, (GT); mutation originally found in mixed breed dogs	Autosomal Recessive	Clear
Hereditary Elliptocytosis		Clear
Hereditary Phosphofructokinase (PFK) Deficiency	Autosomal Recessive	Clear
Macrothrombocytopenia; disease-linked variant originally found in Norfolk and Cairn Terrier	Autosomal Recessive	Clear
May-Hegglin Anomaly (MHA)	Autosomal Dominant	Clear

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## Test results - Additional disorders found in other breeds - page 3

### Ocular Disorders - page 1

Disorder	Mode of Inheritance	Result
Canine Multifocal Retinopathy 2, (CMR2); mutation originally found in Coton de Tulear	Autosomal Recessive	Clear
Canine Multifocal Retinopathy 3, (CMR3); mutation originally found in Laponian Herder	Autosomal Recessive	Clear
Cone Degeneration, (CD) or Achromatopsia; mutation originally found in Alaskan Malamute	Autosomal Recessive	Clear
Cone Degeneration, (CD) or Achromatopsia; mutation originally found in German Shepherd Dog	Autosomal Recessive	Clear
Cone Degeneration, (CD) or Achromatopsia; mutation originally found in German Shorthaired Pointer	Autosomal Recessive	Clear
Cone-Rod Dystrophy 1, (crd1); mutation originally found in American Staffordshire Terrier	Autosomal Recessive	Clear
Cone-Rod Dystrophy 2, (crd2); mutation originally found in American Pit Bull Terrier	Autosomal Recessive	Clear
Cone-Rod Dystrophy, (cord1-PRA / crd4)	Autosomal Recessive (Incomplete Penetrance)	Clear
Cone-Rod Dystrophy, Standard Wirehaired Dachshund, (crd SWD)	Autosomal Recessive	Clear
Congenital Eye Disease; mutation originally found in Irish Soft-Coated Wheaten Terrier	Autosomal Recessive	Clear
Early Onset PRA (EOPRA); mutation originally found in Portuguese Water Dog	Autosomal Recessive	Clear
Early Retinal Degeneration, (erd); mutation originally found in Norwegian Elkhound	Autosomal Recessive	Clear
Generalized Progressive Retinal Atrophy	Autosomal Recessive	Clear
Golden Retriever Progressive Retinal Atrophy 1, (GR_PRA 1)	Autosomal Recessive	Clear
Goniodysgenesis and glaucoma; mutation originally found in Border Collie	Autosomal Recessive	Clear
Italian Greyhound Progressive Retinal Atrophy 1 (IG-PRA1)	Autosomal Recessive	Clear
Primary Hereditary Cataract, (PHC); mutation originally found in Australian Shepherd	Autosomal Dominant (Incomplete Penetrance)	Clear
Primary Lens Luxation, (PLL)	Autosomal Recessive	Clear
Primary Open Angle Glaucoma, (POAG); mutation originally found in Basset Fauve de Bretagne	Autosomal Recessive	Clear
Primary Open Angle Glaucoma, (POAG); mutation originally found in Beagle	Autosomal Recessive	Clear
Primary Open Angle Glaucoma, (POAG); mutation originally found in Norwegian Elkhound	Autosomal Recessive	Clear

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Test results - Additional disorders found in other breeds - page 5

**Endocrine Disorders**

Disorder	Mode of Inheritance	Result
<b>Congenital Dyshormonogenic Hypothyroidism</b> with Goiter; mutation originally found in Shih Tzu	Autosomal Recessive	<b>Clear</b>
<b>Congenital Hypothyroidism</b> ; mutation originally found in Tenterfield Terrier	Autosomal Recessive	<b>Clear</b>
<b>Congenital Hypothyroidism</b> ; mutation originally found in Toy Fox and Rat Terrier	Autosomal Recessive	<b>Clear</b>

**Immunological Disorders**

Disorder	Mode of Inheritance	Result
Autosomal Recessive Severe Combined Immunodeficiency, <b>(ARSCID)</b>	Autosomal Recessive	<b>Clear</b>
<b>Complement 3 (C3) Deficiency</b>	Autosomal Recessive	<b>Clear</b>
<b>Myeloperoxidase Deficiency</b>	Autosomal Recessive	<b>Clear</b>
Severe Combined Immunodeficiency in Frisian Water Dogs, <b>(SCID)</b>	Autosomal Recessive	<b>Clear</b>
X-Linked Severe Combined Immunodeficiency <b>(XSCID)</b> ; mutation originally found in Basset Hound	X-linked Recessive	<b>Clear</b>
X-Linked Severe Combined Immunodeficiency <b>(XSCID)</b> ; mutation originally found in Cardigan Welsh Corgi	X-linked Recessive	<b>Clear</b>

## Test results - Additional disorders found in other breeds - page 7

### Metabolic Disorders

Disorder	Mode of Inheritance	Result
Glycogen Storage Disease Type II or Pompe's Disease, (GSD II)	Autosomal Recessive	Clear
Glycogen Storage Disease Type IIIa, (GSD IIIa)	Autosomal Recessive	Clear
Glycogen Storage Disease Type Ia, (GSD Ia)	Autosomal Recessive	Clear
Hypocatalasia or Acatlasemia	Autosomal Recessive	Clear
Intestinal Cobalamin Malabsorption or Imlerslund-Gräsbeck Syndrome, (IGS); mutation originally found in Beagle	Autosomal Recessive	Clear
Intestinal Cobalamin Malabsorption or Imlerslund-Gräsbeck Syndrome, (IGS); mutation originally found in Border Collie	Autosomal Recessive	Clear
Mucopolysaccharidosis Type IIIA, (MPS IIIA); mutation originally found in Dachshund	Autosomal Recessive	Clear
Mucopolysaccharidosis Type IIIA, (MPS IIIA); mutation originally found in New Zealand Huntaway	Autosomal Recessive	Clear
Mucopolysaccharidosis Type VII, (MPS VII); mutation originally found in Brazilian Terrier	Autosomal Recessive	Clear
Mucopolysaccharidosis Type VII, (MPS VII); mutation originally found in German Shepherd	Autosomal Recessive	Clear
Pyruvate Dehydrogenase Phosphatase 1 (PDP1) Deficiency	Autosomal Recessive	Clear



## Test results - Additional disorders found in other breeds - page 9

### Neurological Disorders - page 1

Disorder	Mode of Inheritance	Result
Acral Mutilation Syndrome, (AMS)	Autosomal Recessive	Clear
Alaskan Husky Encephalopathy, (AHE)	Autosomal Recessive	Clear
Alexander Disease (AxD); mutation originally found in Labrador Retriever	Autosomal Dominant	Clear
Bandera's Neonatal Ataxia, (BNAt)	Autosomal Recessive	Clear
Benign Familial Juvenile Epilepsy or Remitting Focal Epilepsy	Autosomal Recessive	Clear
Cerebellar Cortical Degeneration, (CCD); mutation originally found in Vizsla	Autosomal Recessive	Clear
Cerebral Dysfunction; mutation originally found in Friesian Stabyhoun	Autosomal Recessive	Clear
Dandy-Walker-Like Malformation (DWLM); mutation originally found in Eurasier	Autosomal Recessive	Clear
Early-Onset Progressive Polyneuropathy; mutation originally found in Alaskan Malamute	Autosomal Recessive	Clear
Fetal Onset Neuroaxonal Dystrophy, (FNAD)	Autosomal Recessive	Clear
Hereditary Ataxia or Cerebellar Ataxia; mutation originally found in Old English Sheepdog and Gordon Setter	Autosomal Recessive	Clear
Hereditary Ataxia; mutation originally found in Norwegian Buhund	Autosomal Recessive	Clear
Hyperekplexia or Startle Disease	Autosomal Recessive	Clear
Hypomyelination; mutation originally found in Weimaraner	Autosomal Recessive	Clear
Juvenile Myoclonic Epilepsy, (JME); mutation originally found in Rhodesian Ridgeback	Autosomal Recessive	Clear
Juvenile encephalopathy; mutation originally found in Parson Russell Terrier	Autosomal Recessive	Clear
L-2-Hydroxyglutaric aciduria, (L2HGA); mutation originally found in Staffordshire Bull Terrier	Autosomal Recessive	Clear
L-2-Hydroxyglutaric aciduria, (L2HGA); mutation originally found in West Highland White Terrier	Autosomal Recessive	Clear
Lagotto Storage Disease, (LSD)	Autosomal Recessive	Clear
Neonatal Cerebellar Cortical Degeneration or Cerebellar Abiotrophy, (NCCD)	Autosomal Recessive	Clear
Neonatal Encephalopathy with Seizures, (NEWS)	Autosomal Recessive	Clear

## Test results - Additional disorders found in other breeds - page 11

### Neuromuscular Disorders

Disorder	Mode of Inheritance	Result
Congenital Myasthenic Syndrome (CMS); mutation originally found in Labrador Retriever	Autosomal Recessive	Clear
Congenital Myasthenic Syndrome, (CMS); mutation originally found in Jack Russell Terrier	Autosomal Recessive	Clear
Congenital Myasthenic Syndrome, (CMS); mutation originally found in Old Danish Pointing Dog	Autosomal Recessive	Clear
Episodic Falling Syndrome, (EFS)	Autosomal Recessive	Clear
Exercise-Induced Collapse, (EIC)	Autosomal Recessive (Incomplete Penetrance)	Clear
GM1 Gangliosidosis; mutation originally found in Portuguese Water Dog	Autosomal Recessive	Clear
GM2 Gangliosidosis, mutation originally found in Japanese Chin	Autosomal Recessive	Clear
GM2 Gangliosidosis; mutation originally found in Toy Poodle	Autosomal Recessive	Clear
Globoid Cell Leukodystrophy or Krabbe Disease, (GLD); mutation originally found in Irish Setter	Autosomal Recessive	Clear
Globoid Cell Leukodystrophy or Krabbe Disease, (GLD); mutation originally found in Terriers	Autosomal Recessive	Clear
Paroxysmal Dyskinesia, (PxD); mutation originally found in Irish Soft Coated Wheaten Terrier	Autosomal Recessive	Clear

## Test results - Additional disorders found in other breeds - page 13

### Dermal Disorders

Disorder	Mode of Inheritance	Result
Dystrophic Epidermolysis Bullosa; mutation originally found in Central Asian Ovcharka	Autosomal Recessive	Clear
Dystrophic Epidermolysis Bullosa; mutation originally found in Golden Retriever	Autosomal Recessive	Clear
Epidermolytic Hyperkeratosis	Autosomal Recessive	Clear
Focal Non-Epidermolytic Palmoplantar Keratoderma, (FNEPPK); mutation originally found in Dogue de Bordeaux	Autosomal Recessive	Clear
Hereditary Footpad Hyperkeratosis, (HFH)	Autosomal Recessive	Clear
Hereditary Nasal Parakeratosis, (HNPK); mutation originally found in Greyhound	Autosomal Recessive	Clear
Ichthyosis; mutation originally found in American Bulldog	Autosomal Recessive	Clear
Ichthyosis; mutation originally found in Great Dane	Autosomal Recessive	Clear
Lamellar Ichthyosis, (LI)	Autosomal Recessive	Clear
Lethal Acrodermatitis, (LAD); mutation originally found in in Bull Terrier and Miniature Bull Terrier	Autosomal Recessive	Clear
Lignous Membranitis	Autosomal Recessive	Clear
Musladin-Lueke syndrome, (MLS)	Autosomal Recessive	Clear
X-Linked Ectodermal Dysplasia, (XHED)	X-linked Recessive	Clear



## APPENDIX

### Explanation of the results of the tested disorders

#### Autosomal recessive inheritance (ARI)

**Clear** - A dog carries no copies of the tested mutation and has no or reduced likelihood of developing and passing on the disease/condition.

**Carrier** - A dog carries one copy of the tested mutation. Carriers typically have a normal, healthy appearance but pass on the mutation to approximately 50% of their offspring.

**At risk** - A dog carries two copies of the tested mutation and is at high or increased risk of developing the disease/condition.

#### Autosomal dominant inheritance (ADI)

**Clear** - A dog carries no copies of the tested mutation and has no or reduced likelihood of developing and passing on the disease/condition.

**At risk** - A dog carries one or two copies of the tested mutation and is at high or increased risk of developing the disease/condition.

#### X-linked recessive inheritance (X-linked)

**Clear** - A dog carries no copies of the tested mutation and has no or reduced likelihood of developing and passing on the disease/condition.

**Carrier** - Female carriers typically have a normal, healthy appearance but carry one copy of the tested mutation on one of their X chromosomes. As males only have one X chromosome, there are no male carriers.

**At risk** - Female dogs at risk carry two mutated copies of the tested mutation. Males carry one copy of the tested mutation on their single X chromosome. Dogs at risk are at high or increased risk of developing the disease/condition.

Please note that the descriptions above are generalized based on typically observed inheritance patterns. When obtaining a 'carrier' or 'at risk' test result, always refer to the corresponding online test documentation for more detailed information on the condition and any exceptions.

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## Terms and Conditions

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AMERICAN  
KENNEL CLUB®

May 10, 2021

DR PAIGE E. JOHNSON  
PO BOX 125  
LEONARDTOWN MD 20650-0125

### Letter of DNA Analysis

Breed: **Mastiff**

Sex: **Male**

Date of Birth: **30-JUN-18**

ID #: **956000009697376**

Date of Analysis: **06-MAY-21**

AKC #: **WS61567001**

AKC Name: **Jfarms General Big Stuff's Wingman**

Owner(s): **Paige Johnson, Sharon Johnson**

DNA Profile #: **V962324**

The following genotype uniquely represents the Neogen Corporation genetic identity of the dog named herein:

Neogen #:

E	E	E	E	C	C	F	F	F	F	G	C	C	B	C	B	B	C	C	D	H	C	D	C	C	X	Y
PEZ1	PEZ3	PEZ5	PEZ6	PEZ8	PEZ12	PEZ20	UCB2010	UCB2054	UCB2079	PEZ16	PEZ17	PEZ21	GEN													

Mark Dunn, EVP, Registration Development  
American Kennel Club

Stewart Bauck, General Manager GeneSeek  
Neogen Corporation